

Amendments to the Claims:

Listing of Claims:

1. (Previously presented) A front-end array process for making a liquid crystal display
5 panel, comprising:
 depositing a molybdenum-containing metal layer on a glass substrate, wherein
 said molybdenum-containing metal layer is a dual-metal layer;
 forming a patterned photoresist on said molybdenum-containing metal layer,
 wherein said patterned photoresist defines a gate and word line array pattern; and
10 using said patterned photoresist as an etching mask, uniformly etching said
 molybdenum-containing metal layer to form said gate and word line array pattern
 having substantially oblique sidewalls, wherein said etching of said
 molybdenum-containing metal layer uses gas mixture, wherein said etching of said
 molybdenum-containing metal layer is detected by an end-point detection method.
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2. (Original) The front-end array process for making a liquid crystal display panel
according to claim 1 wherein after said etching of said molybdenum-containing metal
layer, an over etching is carried out.
- 20 3. (Previously presented) The front-end array process for making a liquid crystal
display panel according to claim 1 wherein said gas mixture is SF₆/O₂ having a ratio
of about 700sccm/300sccm.
4. (Original) The front-end array process for making a liquid crystal display panel
25 according to claim 1 wherein said etching of said molybdenum-containing metal layer
is executed under a process pressure higher than 25 mTorr.
5. (Original) The front-end array process for making a liquid crystal display panel
according to claim 1 wherein said etching of said molybdenum-containing metal layer
30 is further controlled by a source power, a bias power, process pressure, oxygen
flowrate and flowrate of fluorine containing gas.

6. (Canceled)

7. (Canceled)

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8. (Original) The front-end array process for making a liquid crystal display panel according to claim 1 wherein said etching of said molybdenum-containing metal layer is detected by an end-point detection method at an wavelength of about 704nm.

10 9. (Original) The front-end array process for making a liquid crystal display panel according to claim 1 wherein said gas mixture is oxygen/fluorine containing.

10. (Original) The front-end array process for making a liquid crystal display panel according to claim 1 wherein said gas mixture is oxygen/chlorine containing.

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11. (Original) The front-end array process for making a liquid crystal display panel according to claim 1 wherein said gas mixture is oxygen/chlorine/fluorine containing.

12. (Original) The front-end array process for making a liquid crystal display panel according to claim 1 wherein said gas mixture is SiF₆/O₂ containing.

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13. (Previously presented) A front-end array process for making a liquid crystal display panel, comprising:

depositing a molybdenum-containing metal layer on a glass substrate;

25 forming a patterned photoresist and defining a gate and word line array pattern on said molybdenum-containing metal layer; and

etching said molybdenum-containing metal layer by using fluorine/oxygen containing gas mixture containing SF₆/O₂ with a ratio of about 700sccm/300sccm, and using said patterned photoresist as an etching mask to form said gate and word line array pattern.

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14. (Previously presented) The front-end array process for making a liquid crystal

display panel according to claim 13 wherein said gate and word line array pattern have substantially oblique sidewalls.

15. (Original) The front-end array process for making a liquid crystal display panel
5 according to claim 13 wherein after said etching of said molybdenum-containing metal layer, an over etching is carried out.

16. (Canceled)

10 17. (Original) The front-end array process for making a liquid crystal display panel according to claim 13 wherein said etching of said molybdenum-containing metal layer is executed under a process pressure higher than 25 mTorr.

15 18. (Original) The front-end array process for making a liquid crystal display panel according to claim 13 wherein said etching of said molybdenum-containing metal layer is detected by an end-point detection method at a wavelength of about 704nm.

19. (Original) The front-end array process for making a liquid crystal display panel according to claim 13 wherein said molybdenum-containing metal layer is a
20 dual-metal layer.

20. (Previously presented) The front-end array process for making a liquid crystal display panel according to claim 19 wherein said dual-metal layer is Mo/AlNd, MoW/AlNd, or MoW/Al, wherein Mo and MoW are top layers, while AlNd and Al
25 are bottom layers.

21. (New) A front-end array process for making a liquid crystal display panel, comprising:

30 depositing a molybdenum-containing metal layer on a glass substrate, wherein said molybdenum-containing metal layer is a dual-metal layer and said dual-metal layer is Mo/AlNd, MoW/AlNd, or MoW/Al, wherein Mo and MoW are top layers, while AlNd and Al are bottom layers;

forming a patterned photoresist on said molybdenum-containing metal layer,
wherein said patterned photoresist defines a gate and word line array pattern; and

using said patterned photoresist as an etching mask, uniformly etching said
molybdenum-containing metal layer to form said gate and word line array pattern
5 having substantially oblique sidewalls, wherein said etching of said
molybdenum-containing metal layer uses gas mixture, wherein said etching of said
molybdenum-containing metal layer is detected by an end-point detection method.

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